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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ENG, GEORGE

ART UNIT	PAPER NUMBER
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2643

16

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/834,325

Applicant(s)

CLAPP ET AL.

Examiner

George Eng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 24-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 24-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 13.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office action is in response to the amendment filed 12/12/2003 (paper no. 14).

Information Disclosure Statement

2. The information disclosure statement filed 9/17/2003 (paper no. 13) has been considered.

Claim Objections

3. Claim 26 is objected to because of the following informalities: claim 26, line 4, "a docking station" should be --the docking station-- to be corrected. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3, 5-11, 15, 24-25 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig et al. (US PAT. 5,617,539 hereinafter Ludwig) in view of Smith, II (US PAT. 5,768,163 hereinafter Smith) and Hildin (US PAT. 5,844,599).

Regarding claim 1, Ludwig discloses a video conferencing system comprising a main unit, i.e., a laptop computer (col. 15 lines 3-9), the main unit including a device interface, and a processor (100, figure 18A) which obviously includes a memory, wherein the device interface includes one or more ports (101-103, figure 18A), each one or more ports adapted to provide an output to a device or receive input from the device, and the processor and the memory configured to perform video conferencing functions (col. 15 line 16 through col. 18 line 18). In addition, Ludwig teaches the main unit is operable to attach to a docking station for connecting to a video conferencing network, i.e., MLAN (10, figure 1) in order to provide full collaborative multimedia workstation capability (col. 15 lines 9-15 and col. 18 lines 19-34). Thus, one skill in the art would recognize Ludwig in having a docking station adapter configured to removably couple to a docking station that connects the main unit in a communication relation with the video conferencing network. Although Ludwig does not specifically teach the main unit including a camera adapter configured to receive a camera unit, it is old and notoriously well known in the art of a portable computer including a camera adapter to receive a camera unit in order to expand the versatility of the portable computer, for example see Smith (col. 3 line 31

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through col. 4 line 32). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the main unit of Ludwig including the camera adapter configurable to receive the camera unit, as per teaching of Smith, in order to expand the versatility of the portable computer. Furthermore, neither Ludwig nor Smith specifically teaches the processor of the main unit programmed to process audio signals and to generate control signals to control at least one of the direction or zoom of the camera unit in response to the audio signals. However, Hildin teaches a voice following video system comprising means for dynamically detecting audio signals for determining a location of an active speaker and then generating commands to pan or tilt a camera in response to the audio signals (col. 4 lines 43-64). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Ludwig and Smith in having the processor of the main unit programmed to process audio signals and to generate control signals to control at least one of the direction or zoom of the camera unit in response to the audio signals, as per teaching of Hildin, because it makes user friendly by automatically tracking an active speaker during communications.

Regarding claim 2, Ludwig discloses the device interface (101-103, figure 18A) providing a connection to one or more video conferencing peripherals (col. 15 lines 16-24).

Regarding claim 3, Smith discloses a camera unit (13, figure 3) removably electrically and mechanically connected to the main unit (10, figure 3) and connected in a communicating relationship with the main unit through the camera adapter, i.e., a modular portion (col. 4 lines 7-18), wherein the camera including microphone units for providing audio signals to the main unit and the camera that provides video signals to the main unit. The combination of Ludwig and

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Smith differs from the claimed invention in not specifically teaching the camera unit including at least one of a controllable direction or a controllable zoom responsive to control signals generated by the main unit. However, Hildin teaches such (col. 4 lines 43-64). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Ludwig and Smith in having the camera including at least one of a controllable direction or a controllable zoom responsive to control signals generated by the main unit, as per teaching of Hildin, because it makes user friendly by automatically tracking an active speaker during communications.

Regarding claim 5, it is old and notoriously well known in the art of the camera unit receiving power from the main unit in order to simplify the operation structure.

Regarding claim 6, Ludwig discloses to store a program implementing one or more video conferencing protocols (col. 18 lines 38-44).

Regarding claim 7, Ludwig discloses one or more video conferencing peripherals including at least one speaker (700, figure 18A), a video monitor (200, figure 18A) or a camera (500, figure 18A).

Regarding claim 8, Ludwig teaches video conferencing functions including coding and decoding audio, and coding and decoding video data (col. 10 lines 26-39).

Regarding claim 9, Ludwig teaches to provide a user interface to a user of the video conferencing system (col. 15 lines 17-21).

Regarding claim 10, Hildin teaches the plurality of microphones have predetermined location relative to the camera, the processor for calculating a location of an audio source relative to the camera using the predetermined locations of the plurality of microphones and an audio

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signal received from each of the plurality of microphones and the processor responsive generating control signals to the camera to steer the camera to the location of the audio source (col. 4 line 4 through col. 5 line 19).

Regarding claim 11, Hildin teaches the controllable decision including to a controllable pan and a controllable tile (col. 4 lines 51-64).

Regarding claim 15, Ludwig teaches one or more media processors (100, figure 18A) that support processing of audio or video data in a videoconference.

Regarding claims 24-25, the limitations of the claim are rejected as the same reasons set forth of claim 1.

Regarding claims 30-31, the combination of Ludwig and Smith differs from the claimed invention in not specifically teaching the main unit providing control signals to the camera so as to point the camera to change one or more of a pan, tile focus, or zoom of the camera toward a desired location in responsive to control signals, wherein the main unit determines a location of a sound source by at least one microphone comprises a plurality of microphones having predetermined locations relative to the camera for providing audio signals to the main unit, and the desired location is the sound source. However, Hildin teaches a voice following video system comprising a plurality of microphones having predetermined locations relative to a camera, means for dynamically detecting audio signals for determining a location of an active speaker and means for generating commands to pan or tilt a camera in response to the audio signals (col. 4 lines 43-64). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Ludwig and Smith in having the main unit providing control signals to the camera so as to point the camera to change one or

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more of a pan, tilt focus, or zoom of the camera toward a desired location in responsive to control signals, wherein the main unit determines a location of a sound source by at least one microphone comprises a plurality of microphones having predetermined locations relative to the camera for providing audio signals to the main unit, and the desired location is the sound source, as per teaching of Hildin, because it makes user friendly by automatically tracking an active speaker during communications.

6. Claims 4 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig et al. (US PAT. 5,617,539 hereinafter Ludwig) in view of Smith, II (US PAT. 5,768,163 hereinafter Smith) and Hildin (US PAT. 5,844,599) as applied in claim 1 above, and further in view of Robinson (US PAT. 5,745,733).

Regarding claim 4, Ludwig discloses the docking station removably electrically and mechanically connected to the main unit and connected in a communicating relationship with the main unit through the docking station adapter, and the network station including a network port for connecting the docking station in a communicating relationship with the video conferencing network (col. 15 lines 9-15 and col. 18 lines 19-34). The combination of Ludwig, Smith and Hildin differs from the claimed invention in not specifically teaching circuitry for converting video conferencing network data between a first format compatible with the video conferencing network and a second format compatible with the communication channel interface. However, Robinson teaches a communication system comprising a frame processing logic (404, figure 4) for converting incoming frame received from a network (286, figure 2B) into data that can be recognized by a docking station and converting an outgoing signal into frames complying with a

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specific network protocol (col. 6 lines 50-59) in order to provide addition processing capability to the system. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Ludwig, Smith and Hildin in having circuitry for converting video conferencing network data between a first format compatible with the video conferencing network and a second format compatible with the communication channel interface, as per teaching of Robinson, because it provides addition processing capability to the computer system.

Regarding claim 12, Ludwig teaches to use the docking station for connecting to the video conferencing network (col. 15 lines 8-15) so that one skill in the art would recognizes the docking station including at least one of a peripheral component interface card, a multi-vendor integrated protocol card, or a peripheral component interface/multi-vendor integrated protocol card in order to make compatible.

Regarding claims 13-14, Ludwig discloses the network port including at least one data network port and a telecommunications network port, i.e., the network port including one of a digital subscriber line port, integrated service digital network port, or a T1 line port (col. 15 lines 16-63).

7. Claims 26 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig et al. (US PAT. 5,617,539 hereinafter Ludwig).

Regarding claim 26, Ludwig discloses a modular video conferencing system comprising a main unit, i.e., a laptop computer configured to removably electrically and mechanically attached to a docking station (col. 18 lines 19-34) so that the main unit obviously comprises a

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docking station adaptor. In addition, Ludwig teaches the docking station coupled with the main unit to providing communication with a video conferencing network (col. 15 lines 3-15) so that one skill in the art would recognize the docking station including a first adapter configured to removably electrically and mechanically connect to the main unit and a second adapter configured to be connected to the video conferencing network.

Regarding claim 33, Ludwig discloses the main unit further comprising means for storing and executing video conferencing functions (col. 18 lines 38-44).

8. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig et al. (US PAT. 5,617,539 hereinafter Ludwig) in view of Bernard (US PAT. 5,675,524).

Regarding claim 27, Ludwig differs from the claimed invention in not specifically teaching the docking station including a locking mechanism to prevent separation of the main unit from the docking station. However, it is old and notoriously well known in the art of a docking station having a movable securing surface for holding a main unit securely, for example see Bernard (col. 3 line 52 through col. 4 line 14). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the docking station of Ludwig in having the locking mechanism, as per teaching of Bernard, to prevent separation of the main unit from the docking station.

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9. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig et al. (US PAT. 5,617,539 hereinafter Ludwig) in view of Smith, II (US PAT. 5,768,163 hereinafter Smith).

Regarding claim 28, Ludwig differs from the claimed invention in not specifically teaching the modular video conferencing system further comprising a camera unit including an adapter that is removably electrically and mechanically attachable to the main unit, a camera and at least one microphone, wherein the main unit further comprising a camera adapter configured to removably electrically and mechanically attach to a camera unit. However, Smith teaches to expand the versatility of a portable computer by providing a camera adapter configured to removably electrically and mechanically attach to a camera unit, which the camera unit comprising an adapter that is removably electrically and mechanically attachable to the main unit, a camera and at least one microphone (col. 3 line 31 through col. 4 line 32). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Ludwig in having the camera unit including the adapter that is removably electrically and mechanically attachable to the main unit, the camera and at least one microphone, wherein the main unit further comprising the camera adapter configured to removably electrically and mechanically attach to a camera unit, as per teaching of Smith, in order to expand the versatility of the portable computer.

Regarding claim 29, it is old and notoriously well known in the art of the camera unit, as well as the docking station, receiving power from the main unit in order to simplify the operation structure.

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Regarding claim 32, Smith teaches a locking mechanism to prevent separation of the camera a unit from the main unit (figures 3-6 and col. 4 lines 7-49).

Response to Arguments

10. Applicant's arguments with respect to claims 1-15 and 24-33 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Helot (US PAT. 6,231,371) discloses a docking station to accommodate multiple devices simultaneously (abstract). Baker (US PAT. 5,686,957) discloses an automatic voice directional video camera steering system specifically use for teleconferencing (abstract). Endsley et al. (US PAT. 6,005,861) discloses a multi-mode digital camera with computer interface using data packet combining image and mode data (abstract).

12. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

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Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, V.A., Sixth Floor (Receptionist).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Eng whose telephone number is 703-308-9555. The examiner can normally be reached on Tuesday to Friday from 7:30 AM to 6:00 PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A. Kuntz, can be reached on (703) 305-4870. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



George Eng
Examiner
Art Unit 2643